for TCG is blocked at BST's switch. (TR 3428) TCG states that it receives complaints from its business customers that calls from their customers are not getting through. In some instances, TCG customers have threatened to discontinue service as a result of the blocking. (TR 3429) TCG states that it has met with BST to address this issue, but that BST has been largely unresponsive. (TR 3429-30)

TCG also states that, despite requests at a meeting held on May 6, 1997, BST has not provided data regarding the percentage of call blockage it experiences for its internal traffic so that TCG can compare it with the amount of TCG traffic being blocked. (TR 3430; EXH 118, pp.23-24) Unless BST establishes that call blocking rates are the same for itself as for TCG, witness Hoffmann states that BST cannot meet the criteria for the first checklist item. (TR 3431)

TCG states that BST's network provides for alternate routing, but that TCG traffic is restricted to a single route through BST's access tandem with no overflow protections. (Hoffmann TR 3431-32; Stacy TR 1551; EXH 118, p.22) Although in some cases, the blocking is due to incorrect translations performed in BST's end office switches, the lack of alternate routing exposes TCG to the risk of network failure due to a single point of blockage on BST's tandem trunk. (Hoffmann TR 3425, 3427, 3433, 3441) Such significant differences between the two network designs violates the requirements of the Act and the FCC's rules. (BR p.18) TCG states that BST's call blocking level approaches zero while TCG is receiving complaints from its customers that their calls are blocked. (TR 3429)

TCG also states that it has requested that BST install end office connections for its traffic going to TCG, because this would alleviate the congestion at BST's tandems to a large degree. However, BST has refused to install them. (Hoffmann TR 3431, 3441; EXH 118, p.20) At deposition, witness Hoffmann stated he asked that BST install end office trunking where TCG has installed it, but that BST simply said it would continue to install its trunking at the tandems, and would offer no explanation at that meeting. (EXH 118, pp.20-21) TCG states that this makes TCG's network design inferior to BST's. (BR p.19)

BST witness Stacy states that trunking arrangements are designed to meet particular blocking criteria. Final trunk groups are designed to meet a P.01 grade of service. (TR 1680) A P.01 grade of service means that 1%, or one out every one hundred calls would be blocked during the average busy hour. (Stacy TR 1657) He asserts that BST provides that grade of service except in instances

of unanticipated traffic changes. (TR 1659) He states that BST reviews internal blocking reports weekly. (TR 1671)

BST provided, as a deposition exhibit, traffic studies for trunks carrying ALEC traffic in the Southeast LATA, which is where TCG operates. (EXH 52, pp.21-23; TR 1660-61) The traffic study results, which were confidential, show that TCG has experienced some significant blockage problems. It also shows that BST has added a substantial number of trunks between its tandem and TCG's switches during the study period provided. BST appears to suggest that TCG has not provided it with sufficient "advance knowledge" of increases in its traffic, and that this can be attributed to be a cause of the blocking that has occurred between BST and TCG's network. (EXH 52, pp.84-85)

Witness Stacy testified that it takes anywhere from thirty days to four months to add additional trunks once the need is recognized, depending on whether spare capacity is available or if additional equipment has to be purchased. (TR 1671-72; 1675-76) In response to a specific case in Exhibit 52 showing two trunk augmentations at one week intervals, he acknowledged that trunks could be added in five days if capacity is available. (TR 1677) TCG witness Hoffmann testified that the BST account team with which he worked had quoted provisioning intervals of 45 business days for initial turn up of new trunks, and five to ten days to augment existing ones. (TR 3454)

TCG's interconnection agreement provides that:

> For network expansion, the parties agree to review engineering requirements on a quarterly basis and establish forecasts for trunk utilization as required by Section IV of this Agreement. New trunk groups will be implemented as dictated by engineering requirements for both parties. (Section XVII.F)

TCG states that it meets regularly with BST, and TCG does establish forecasts. (EXH 118, p.18)

In response to TCG's position that blockage occurs not only in the trunks between BST's tandem and TCG's switch, but also between BST's own end office and its tandem, witness Stacy noted that the trunk groups from its end offices to the tandem carry IXC and independent LEC traffic as well. Therefore if TCG were experiencing blocking at that point in the network, so would all the other carriers as well. (TR 1672-73)

Witness Stacy acknowledged that the data provided did not prove or disprove TCG's contentions with respect to blockage of TCG calls in BST's own network, but said it was responsive to the questions asked. (Stacy TR 1680) He stated that the ARMIS report that is provided by BST to the FCC would demonstrate the blockage on the trunk groups that go to the access tandem. (TR 1680; 1693) He also stated that BST has not furnished any specific data to TCG about blockages on BST's side of the network, but that neither TCG nor any other ALEC had asked for that data. (TR 1682) TCG witness Hoffmann testified that TCG has requested that information on several occasions, but that BST has not provided it. (TR 3445, 3466-67)

The particular ARMIS data provided at hearing shows that, for period of time studied, blocking on BST's side of the access tandem was not a widespread problem. (EXH 59). However, the ARMIS data provided does show that, as recently as August, there has been some substantial blocking for traffic carried to five ALECs, of which TCG was one. The ARMIS data requires that BST report on blockage rates in excess of a certain percent over a given period of time. However, the blocking rates which were reported ranged from .0345% to .2424%. This is well in excess of the design standard of .005% for trunks going to an access tandem. Staff would note that this data provides no specific information as to what extent, if at all, ALEC traffic is overflowed to alternate or final trunks at peak periods.

BST did not originally produce the ARMIS data or any other data with its filing in this case to show that it is providing comparable trunking capacity and routing for ALEC traffic relative to that which it provides itself. Moreover, ALEC traffic constitutes a small part of the total traffic that BST carries over its own network. (EXH 59) BST has carried IXC and independent LEC traffic for years. It should be well versed in forecasting requirements and installation of sufficient capacity so that end user calls are not disrupted.

TCG's interconnection agreement does not contain specific provisions for diversity or alternate routing as do some other agreements. BST provided no information to refute TCG's claim that BST does not reroute its traffic if blocking occurs in the BST network, whereas BST's traffic gets rerouted to the local tandem.

MCI, when questioned, reported no current problems with blockage. (Gulino TR 3169) However, based on the data in Exhibit 52, TCG carries greater amounts of traffic in the Southeast LATA than the other carriers for which data was reported.

TCG also notes that BST is required by its agreement to establish matching interconnection trunking facilities. Section IV.H. states of TCG's agreement states:

> The parties agree to establish trunk groups from the interconnecting facilities ... such that each party provides a reciprocal of each trunk group established by the other party. Notwithstanding the foregoing, each party may construct its network, including the interconnecting facilities, to achieve optimum cost effectiveness and network efficiency.

TCG also states that BST has repeatedly refused to provide end office connections, an architecture which it states is an industry standard for both local and toll traffic routing. According to witness Hoffmann, implementation of end office connections would alleviate congestion at the BST tandems. (Hoffmann TR 3431) Section IV.G of the TCG Interconnection agreement states in part:

> ... TCG shall establish a point of interconnection at each and every BellSouth access tandem within the local calling area TCG desires to serve for interconnection to those end offices that subtend the access tandem. Alternatively, TCG may elect to interconnect directly at the end offices for interconnection to end users served by that TCG end office. BellSouth will connect at each TCG end office or tandem inside that local calling area.

TCG states that it took BST three months to provide blocking data to TCG once the blocking problem was discovered. (EXH 52, pp. 87-88) TCG states that it has raised the issue at its meetings with BST. (TR 3445, 3466-67) BST witness' Stacy's statement that TCG has the responsibility to ensure that BST has adequate trunk capacity for traffic going from its network to TCG is not acceptable. (TR 1530) Although TCG does have the responsibility to inform BST via forecasts and regular communication, BST must assume the responsibility for trunk capacity requirements on its network. Staff believes that BST needs to provide ALECs with more frequent and better data on their traffic going over BST's network.

The evidence in the record indicates that both parties need to improve communications with respect to potential fluctuations in traffic. (Hoffmann TR 3441) However, BST has violated the terms

of its agreement and has definitely not complied with the parity requirement in the Act.

3. Local Tandem Interconnection:

MCI argues that although the point of interface for the exchange of local and EAS traffic between independent telephone companies and BST is the local tandem, BST to date refused to allow interconnection at local tandems. (Martinez TR 3272-3273; Gulino TR 3135) At deposition, witness Martinez revised MCI's position on the basis of a memo from BST to MCI stating that BST would allow local tandem interconnection. (EXH 113, pp.164-167; 290-292) However, MCI states that at hearing BST reversed itself: BST witness Scheye stated it was not currently allowed and that ALECs would have to go through the BFR process if they wanted it. (BR pp.25-26; TR 593)

MCI witness Martinez testified that BST's local traffic remains on the local network and does not utilize the access tandem. Hence local traffic won by an ALEC is removed from the local network and local tandem, and placed on the IXC toll network (the access tandem). This has the net effect of enhancing the BST local service while degrading the IXC toll network. (TR 3273) At deposition, BST witness Scheye refuted MCI's testimony, saying that separate trunk are used for access and local traffic. (EXH 21, p.124) However, witness Stacy testified at hearing that the same trunk group "carries all of the traffic destined for every IXC in that LATA, all of the independent companies that are served by interLATA, intraLATA services all together with the ALEC's traffic. (TR 1673)

BST states that while it reroutes its traffic to local tandems, this arrangement "is not much of an advantage" to ALECs. Local tandem interconnection has traditionally been used by BST and independent LECs for exchange of local traffic. (EXH 21, p.124) Witness Scheye states that local tandem interconnection is not provided for in its agreement with MCI. (TR 593) If MCI wishes, it may request it via the BFR process. (TR 592-93)

Witness Scheye also stated that local tandem interconnection was not offered in the SGAT. (TR 610). However, BST witness Milner states that the SGAT does include it. (TR 861)

BST witness Milner states that local tandem interconnection is technically feasible. (Milner TR 862) He notes, however, that it might not be possible "technically to measure that traffic sufficiently to determine the proper jurisdiction." On questioning, he acknowledged that he was referring to the Percent

Local Usage (PLU) factor. (TR 864) The PLU factor and its significance is discussed later on.

MCI's and other ALECs' agreements state that interconnection will be provided at tandems and end offices, but they do not specify access tandems only. This Commission has also ordered BST to provide tandem interconnection, without qualification as to which tandem. (EXH 1, Order No. PSC-96-1579-FOF-TP) BST has the responsibility to provide local tandem interconnection if it is requested. To the extent the only limitation is the development of the PLU factor, local tandem interconnection should definitely be provided, and no BFR process should be required. Staff believes that BST's refusal to do so is a violation of its agreement with MCI, and not in compliance with the Act's requirement that interconnection shall be provided at any technically feasible point. PLU factors are addressed more specifically below.

4. Two-Way Trunking and Percent Local Usage Factor

Under the terms of AT&T's Interconnection Agreement, AT&T is to be able to place local, intraLATA, and interLATA calls over two-way trunks. AT&T states that it is technically feasible and BST has agreed to do it. (Hamman TR 2642) AT&T's complaint is that the only thing left to work out is the Percent Local Usage (PLU) factor that would permit billing of appropriate charges for the various types of traffic. AT&T states that BST has delayed agreement on the PLU factors through "its improper insistence that the ... BFR process is the only vehicle for the parties to address this issue." (Hamman TR 2642) AT&T believes that since two-way multi-jurisdictional trunking is provided for in their agreement, BST should not require the BFR process, which is for items requested outside the agreement. (TR 2643)

The PLU factor has yet to be developed for ALECs utilizing trunks with multi-jurisdictional traffic. (Scheye TR 504) Development of the PLU factor has been the major source of delay in implementing two-way trunking. Staff does not believe this problem should take as long as it has to resolve. LECs commonly use surrogate factors in lieu of or prior to development of actual data upon which to rely. Staff believes that BST should allow the use of a surrogate, and not use the collection of actual data as an excuse to delay implementation of ALEC agreements. BST's interconnection agreement with TCG provides for the use of a surrogate PLU until sufficient data has been collected to calculate one. (Section IV.E) TCG witness Hoffmann stated that BST had provided TCG with a PLU for use in calculating end usage, and that TCG was experiencing no problems with it. (EXH 118, p.33)

BST witness Scheye argued that the majority of carriers believe that one-way trunks are not only adequate, but would also be the most efficient. (TR 504) He stated that AT&T's Interconnection Agreement included provisions for one-way trunks, but did not mention that the Agreement also specifically includes language and drawings specifying how two-way trunking carrying all traffic would be developed. (TR 504) Based on BST's response to AT&T's contention that there were still problems with provisioning of two-way trunking, BST is not in compliance with either AT&T's Interconnection Agreement or the requirements of the Act.

5. Confirmation of SS7 Signaling Transfer Point Code Activation.

SS7 code activation is required for proper exchange of traffic between BST and ALECs. (EXH 33, p. 192; TCG Interconnection Agreement - IV.G) BST confirmation that SS7 Point Codes have been correctly loaded is necessary to facilitate the exchange of SS7 messages. (Hoffmann TR 3437, 3442) TCG testifies that such confirmation is required by its agreement yet BST does not do this. (EXH 118, p.32)

With respect to TCG's assertion that BST does not provide the necessary confirmation that SS7 Point codes have been activated, BST witness Milner responded that to his knowledge TCG never requested confirmation of SS7 point codes. (Exh 33, p.182,194) However, TCG witness Hoffmann referenced several letters to BST which requested such confirmation, and which he testified had gone unanswered. (Exh 118, p.32) Witness Hoffmann also stated at deposition that he had recently received verbal assurance that the issue is being looked at. (Ibid.) TCG's Interconnection Agreement, Section IV.G, states that STP/SS7 connectivity is required at each interconnection point. It does not specify any notification conditions, but does require that interconnecting facilities shall conform to industry standards pursuant to BellCore Standard No. TR-NWT-00499 and BellSouth Guidelines to Technical Publication, TR-TSV-000905.

Staff believes that BST has the responsibility to work with TCG and other ALECs to ensure that interconnection procedures are working properly. BST's position in this proceeding that such confirmation was never requested appears uncooperative and nonresponsive. Even if SS7 confirmation is not specifically required in TCG's agreement, BST should nevertheless respond to ALEC written inquiries in a timely fashion.

6. Provision of Carrier Identification Codes (CIC).

TCG witness Hoffmann stated that IXC CIC codes must be loaded into TCG's switch to properly recognize the IXCs providing service to TCG's customers through BST access tandems. TCG states that it needs to have this information to properly route traffic to those IXCs. (Hoffmann TR 3436) According to TCG, BST provides CICs to its newly certificated IXC. (BR p.15) TCG's interconnection agreement with respect to meet point billing also requires that BST provide the carrier billing name, the carrier billing address and the CIC, but BST has not complied despite several requests from TCG. (EXH 118, pp.30-31; EXH 33, pp.178,190)

According to TCG, BST only provides a carrier's Access Customer Name Abbreviation (ACNA). TCG must then cross reference the ACNA in the Local Exchange Routing Guide (LERG) to obtain the proper CIC. TCG witness Hoffmann states that in several instances, the ACNA has not matched the associated carrier name provided by BST. (TR 3436-37)

At deposition, BST witness Stacy stated TCG was correct in its allegation, but that the ACNA is more accurate, and that it is what BST itself uses. (EXH 33, p.178) He further states that any errors may be the result of the IXCs themselves not furnishing the information, or it could be possible that some IXCs may consider their CIC proprietary. He knew none of this as a certainty, saying he had not had time to investigate. (EXH 33, p.180)

TCG's interconnection agreement states in part:

> The parties agree to provide each other with the proper call information, i.e., ... CIC, ... and all proper translations for routing between networks and information necessary for billing where BellSouth provides recording capabilities. The exchange of information is required to enable each party to bill properly. (Section XVII.G.)

There is no evidence in the record showing whether CIC data or ACNA is more reliable. It is in the record, however, that BST has agreed to provide it and does not. This is a violation of its agreement with TCG.

7. Provision of Meet Point Billing Data.

According to TCG's agreement, BST is required to provide meet point billing data to TCG on a daily basis to the extent daily IXC usage has occurred. (EXH 118, pp.26-27) Such data is required for TCG to properly bill IXCs for services provided by TCG. (Hoffmann TR 3435) BST has yet to provide any such records since the beginning of its agreement with BST. Thus, TCG has been unable to bill IXCs for any calls terminated to TCG's end office since July 1996. (EXH 118, p.27; TR 3442) TCG has asked BST about this on several occasions beginning in April 1997, and according to witness Hoffmann, BST has promised to look into it. (EXH 118, p.28) TCG states that other BOCs provide this data to TCG. (TR 3442) BST witnesses could not explain why this problem is occurring despite knowing before depositions that they would be asked to address the TCG issues. (EXH 21, p.142)

At hearing, witness Scheye testified that meet point billing is required in most of BST's interconnection agreements. (TR 562) He also stated that BST can provide it to ALECs and that it currently does provide it to independent LECs. (TR 563) BST, despite questioning, has been unable to explain why it is not providing meet point billing data to ALECs. (EXH 21, p.142) Thus, BST can bill IXCs, but ALECs who require meet point data, cannot.

First, staff believes that this situation must be corrected immediately. BST has not honored the terms of its agreement, and has demonstrated no reason for the lapse.

Second, staff would expect, in a subsequent proceeding, that BST will demonstrate not only that it is providing meet point billing data, but also show how this failure will not recur. Until then, however, staff believes that BST has not complied with the terms of its agreements or the Act.

8. Additional Concerns with the SGAT

1) Divided Local Calling Areas.

MCI states that in order to provide competitive local service at the same level of quality as BST, it must be able to terminate traffic throughout a local calling area. MCI cited its experience in Memphis where calls between BST's and Southwestern Bell's (SBC's) local service areas were blocked by BST. BST stated it would not pass MCI traffic to SBC until MCI had established an interconnection agreement with SBC. (Gulino TR 3152-53) MCI says that BST must be required to terminate calls that MCI cannot in areas served at least in part by BST, so that MCI customers will not be isolated. (Gulino TR 3151-3154)

BST took no position on this issue in Florida. (Gulino TR 3153) Witness Gulino "presumes" BST's position would be the same as in Memphis although the issue has not come up in this proceeding. (TR 3153) It addresses the question of how to handle traffic terminating to a carrier in the same local calling area other than the carrier with whom an interconnection agreement is signed.

Staff believes this is not a compliance issue with respect to the SGAT in this proceeding. There is no evidence to suggest that the dispute has been raised in Florida. A similar point was addressed in the arbitration dockets concerning the way in which ISP traffic would be handled when an end user called an ISP served by an ALEC or other carrier. In that case, the Commission determined that agreements needed to be adopted between all the carriers and ISPs, prior to carriers billing each other or paying the ISP its share of the revenues billed by the carrier. In no instance, however, was an end user's call to an ISP to be blocked.

2) Conflicting language on multi-jurisdictional trunks. The SGAT appears to conflict on this issue. One provision states that carriers may not combine local and toll on a two-way trunk. Another provision states that mixing traffic is allowed using PLU factors. (EXH 36) This confusion should be remedied, and it should be clearly stated that PLU factors can be utilized to facilitate the use of two-way trunks.

3) Definition of Local Traffic. The SGAT contains a statement that states that no company shall represent Exchange Access Traffic as Local Interconnection Traffic. MCI states that if the Commission approves this part of the definition of local traffic, it must require BST to provide ALECs a complete listing of the BST NPA-NXXs that make up each local service area, and in a usable format. (Martinez TR 3278)

General Comments in the Record

Lack of Parity with other ILEC Contracts. AT&T states that a comparison between the way BST treats ALECs and other ILECs may be one of the most definitive tests for discrimination. (BR 27) AT&T notes that BST currently exchanges local traffic, and jointly provides other services with almost every ILEC in Florida pursuant to negotiated interconnection agreements. (See EXH 66) AT&T states that the terms and conditions in these contracts are more favorable than those in ALEC contracts. For example, AT&T states that there are no provisions in the ILEC agreements for the "endlessly time consuming bona fide requests for every detail of the joint provision of service that BellSouth imposes on the

ALECs." (BR p.27) AT&T asserts that this disparate treatment constitutes discrimination and hence BST has not complied with the requirements of the interconnection checklist item. (BR p. 28) AT&T states that despite the fact that BST says it is providing interconnection in compliance with the checklist, it has provided no evidence that such interconnection is equal in quality to that which it provides itself. (Hamman TR 2641)

SUMMARY

As stated in the beginning of this issue, staff has considered the interconnection issue and parties' positions in terms of the following:

- Whether BST has implemented all the interconnection requirements pursuant to Section 271(d)(3) of the Act. That is, whether interconnection trunks are available in sufficient quantities; and whether interconnection has been provided upon request at any technically feasible point.

- Whether the interconnection arrangements in ALEC agreements, approved pursuant to Sections 251 and 252 of the Act, have been provided in a complete and timely fashion;

- The degree to which the ALEC is able to operate utilizing the provisions of its interconnection agreement;

- Whether the rates, terms and conditions for interconnection, specifically collocation, have been set in conformance to the pricing requirements of the Act. This would mean, for prices proposed in the SGAT that this Commission has not set pursuant to Section 252 (d)(2), BST should have filed TSLRIC studies to support the rates in the SGAT.

Some ALECs are in fact providing service to their customers over interconnection facilities. Substantial evidence was submitted, however, showing that much remains to be done before BST can be said to be in compliance with the requirements of the Act. ALECs' individual problems and difficulties with this checklist item, while important themselves, when viewed together, generally indicate that BST has yet to develop the ability, and by the testimony of its witnesses, the mind set, to provide all facets of interconnection as required in the Act, in a timely and efficient manner.

BST's general response to many parties' criticisms of its checklist performance in relation to their own agreements, is that ALECs are merely trying to delay competition. (EXH 21, p.122; BR

p.3) In fact, in its brief, BST states that the ultimate test in this proceeding that BST must meet is not whether BST has fulfilled all the terms of its agreements with ALECs but whether it has made interconnection generally available to ALECs, as required by Section 252(f) and 271. (BR p.25) Staff does not agree that that is all that is required of BST.

Staff concludes that BST has not fulfilled all the terms of its Agreements, and has not made a showing that it has complied with the requirements of the Act because carriers cannot compete meaningfully under the terms of their agreements. Staff therefore recommends that BST has not satisfied the requirements of Checklist item #1, and therefore fails on this issue.

As noted in this issue, since some interconnection provisions have not yet been established, there is no way to conclude, until they have been implemented, whether or not BST has complied with the terms of the Act or ALEC agreements. Physical collocation is a prime example, as well as the problems surrounding virtual collocation.

Lastly, improved communications between BST and ALECs are essential before service can be deemed satisfactory or at parity. Although everyone carries some responsibility for this, we believe that the Act places a major responsibility on BST to make local competition viable. To that extent, BST must take a leadership role in making that happen.

ISSUE 3: Has BellSouth provided nondiscriminatory access to network elements in accordance with the requirements of section 251(c)(3) and 252(d)(1) of the Telecommunications Act of 1996, pursuant to 271(c)(2)(B)(ii) and applicable rules promulgated by the FCC? (Stavanja)

RECOMMENDATION: No. BellSouth has failed to demonstrate that it provides nondiscriminatory access to unbundled network elements requested by competing carriers. In addition, BellSouth has not demonstrated that it has provided access to Operations Support System functions in essentially the same time and manner as it does for itself.

POSITION OF THE PARTIES

ACSI: No. BellSouth has neither provided nondiscriminatory access nor has the company developed performance standards or measurements.

AT&T: No. In order to meet this checklist item, BellSouth must prove that it actually has provided or presently is capable of providing network elements not yet requested, and access to all requested network elements at parity and on a nondiscriminatory basis. BellSouth has not done so. Among other things, BellSouth has not yet implemented nondiscriminatory access to its OSS to order network elements. Further, BellSouth cannot render a bill for usage sensitive elements of the local switch as required by Act. 47 U.S.C.A. sections 251(c)(3), 153(29), and 153(45)

BST: Yes. Access is available and provided to network elements on a nondiscriminatory basis. Also, a number of physical collocation arrangements are in progress.

FCCA: No. BellSouth has failed to provide nondiscriminatory access to unbundled switching, as a separate element. It has failed to provide unseparated network element combinations. BellSouth has failed to prove that it can provide billing for unbundled switching on terms of parity. BellSouth has failed to comply with the FCC rule requiring it to switch customers to a new local entrant in the same interval that it switches customers between IXCs using the local switching network element.

FCTA: No. BellSouth has failed to meet its burden of demonstrating compliance with the Act and FCC 's rules.

ICI: No, BellSouth has not provided Intermedia with access to unbundled network elements ("UNEs") (e.g., unbundled frame relay loops and unbundled subloops) at any technically feasible point consistent with the requirements of the 1996 Act. Similarly, because nondiscriminatory access to BellSouth's OSS is not completely available to Intermedia and other competing providers of telephone exchange services at parity with BellSouth, BellSouth is not providing nondiscriminatory access to network elements consistent with the 1996 Act.

MCI: No, BellSouth has failed for a number of reasons. First, the prices for UNEs are not cost-based as required by the Act. Second, BST refuses to provide combinations of UNEs, even where those elements are combined in its network today. Third, BST's OSS for UNEs do not meet the nondiscrimination requirement of the Act.

MFS/WorldCom: No. BellSouth has not provided nondiscriminatory access to network elements primarily due to its failure to provision the "platform" and its failure to properly price the elements.

Sprint: No. Loop, switch and transport unbundling is technically feasible. Network elements are not the same as retail services for pricing purposes. BellSouth must prove a requested network element is not technically feasible. There should be no discrimination in the provision of network elements. Once provided, a network element should be presumed to be technically feasible. Prices for network elements should be cost-based. There should be no restrictions on how network elements can be used.

TCG: No. BellSouth has not demonstrated that it is providing nondiscriminatory access to network elements in accordance with the requirements of Sections 253(c)(3) and 252(d)(1) of the Act.

STAFF ANALYSIS: This issue addresses whether or not BST has provided nondiscriminatory access to network elements in accordance with the Act, FCC rules and orders, and FPSC orders. In addition, this issue addresses nondiscriminatory access to Operations Support System (OSS) functions. Access to OSS functions is integral to the actual provision of unbundled network elements (UNEs) and other services. This issue corresponds with checklist item (ii) of the Act.

INTERPRETATION OF THE ACT's REQUIREMENTS

In this section of the analysis, staff provides the requirements per the Act, and the FCC's interpretation of those

requirements from the FCC's First Report and Order (EXH 1, FCC 96-325, also known as the Local Competition Order), and the FCC's Ameritech Order (EXH 1, FCC 97-298). Staff will conclude the analysis of this section by summarizing the requirements being used for this issue.

SECTION 271 REQUIREMENTS

Section 271(c)(2)(B) states that access or interconnection provided or generally offered by a Bell operating company must meet certain checklist items. Checklist item two is referenced in the Act as Section 271 (c)(2)(B)(ii). This section states that a Bell operating company meets this subsection if such access and interconnection includes:

> Nondiscriminatory access to network elements in accordance with the requirements of sections 251(c)(3) and 252(d)(1).
>
> Section 251(c)(3) states:
>
> Unbundled Access.-The duty to provide, to any requesting telecommunications carrier for the provision of a telecommunications service, nondiscriminatory access to network elements on an unbundled basis at any technically feasible point on rates, terms, and conditions that are just, reasonable, and nondiscriminatory in accordance with the terms and conditions of the agreement and the requirements of this section and section 252. An incumbent local exchange carrier shall provide such unbundled network elements in a manner that allows requesting carriers to combine such elements in order to provide such telecommunications service.
>
> Section 252(d)(1) states:
>
> Interconnection and Network Element Charges.-Determinations by a State commission of the just and reasonable rate for the interconnection of facilities and equipment for purposes of subsection (C)(2) of section 251, and the just and reasonable rate for network elements for purposes of subsection (c)(3) of such section-
>
> (A) shall be-

(I) based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the interconnection or network element (whichever is applicable), and

(ii) nondiscriminatory, and

(B) may include a reasonable profit.

FCC's INTERPRETATION OF SECTION 271 REQUIREMENTS

The FCC interpreted the requirements of the Act in its First Report and Order (EXH 1, FCC 96-325). In addition, the FCC developed a set of rules under its authority provided in the Act. Due to the length of each rule developed by the FCC regarding UNEs, staff will provide a summary of each rule.

FCC Rules

First, 47 C.F.R. §51.307, **Duty to provide access on an unbundled basis to network elements.** This rule restates, in subpart (a), the nondiscriminatory access standard of the Act for UNEs.

Subpart (b), states that the duty to provide access to UNEs in accordance with 251(c)(3) of the Act includes a duty to provide a connection to a UNE, independent of any duty to provide interconnection.

Subpart (c), states that an incumbent LEC shall provide all of the features, functions, and capabilities of the requested UNE, such that any telecommunications service may be offered by means of that network element.

Subpart (d), states that an incumbent LEC shall provide a requesting carrier, access to a feature or functionality of a network element, separate from a feature or functionality of any other network element. The incumbent LEC may impose a charge for such separation.

Section 51.309, **Use of unbundled network elements.** It states in subpart (a), that an incumbent LEC shall not impose restrictions or limitations on the use of UNEs, that would not allow a requesting carrier to provide a service in the manner that it intends.

Subpart (b), states that a carrier may provide exchange access services to itself, in order to provide interexchange service to its subscribers, when purchasing access to UNEs.

Supbart (c), states that a carrier is entitled to exclusive use of a UNE or a feature, function, or capability, that is purchased, for a period of time. The incumbent LEC is not discharged from its duty to provide maintenance or repair of the UNE.

Section 51.311, **Nondiscriminatory access to unbundled network elements.** This rule states in subpart (a), that the quality of a UNE, as well as the quality of access to the UNE, shall be the same for all carriers.

Subpart (b) states that the quality of a UNE, as well as the quality of access to the UNE, shall be at least equal in quality to that which the ILEC provides for itself. The ILEC is charged with the duty to demonstrate to the state commission, why it cannot meet this requirement.

Subpart (c) requires ILECs to provide a superior level of quality than it provides to itself, if a carrier requests such quality. This subpart was vacated by the Eighth Circuit Court of Appeals (Iowa Util. Bd. V. FCC, Nos. 96-3321, *et al.*, 1997 WL 403401, at 46(8th Cir,. July 18, 1997).

Section 51.313, **Just, reasonable and nondiscriminatory terms and conditions for the provision of unbundled network elements.** Subpart (a) states that the terms and conditions for UNEs shall be offered equally to all carriers.

Subpart (b) requires that the time period for provisioning access to UNEs must not be less favorable to a requesting carrier than that which the ILEC provides to itself.

Subpart (c) requires the ILEC to provide access to the five functions of the ILEC's OSS to a carrier purchasing UNEs from the ILEC.

Section 51.315, **Combination of unbundled network elements.** This rule requires, in subpart (a), an ILEC to provide UNEs in such a manner that a requesting carrier may combine the UNEs to provide a service.

Subpart (b), prohibits an ILEC from separating any UNEs that are currently combined.

Subparts (c)-(f) of Section 51.315, have been vacated by the 8th Circuit Court. (Iowa Util. Bd. V. FCC, Nos. 96-3321, *et al.*, 1997 WL 403401, at 46(8th Cir,. July 18, 1997) Even though these

subparts have been vacated by the court, staff provides a summary of each.

Subpart (c), requires an ILEC to combine UNEs in any manner requested by a carrier, unless the combination is not technically feasible or, if the combination would restrict access to UNEs by other carriers.

Subpart (d) requires the ILEC to combine its UNEs with any network elements owned by a requesting carrier in any technically feasible manner.

Subpart (e) requires an ILEC to demonstrate to a state commission why a requested combination of UNEs is not technically feasible to provide.

Subpart (f) states that an ILEC must prove to a state commission that the reason for denying a request to combine UNEs is because the combination would impair the ability of other carriers to access UNEs or to interconnect with the ILECs network.

Section 51.317, **Standards for identifying network elements to be made available.** This rule states that a state commission shall determine the technical feasibility of providing access to a network element on an unbundled basis. The rule only permits of the state commission to decline unbundling of an element if doing so: (1) reveals proprietary information and that it is technically feasible for a carrier to provide service by using other nonproprietary UNEs; and (2) that if the ILEC refused to offer access to a UNE, the quality and cost to the carrier to provide a service would not change, when compared to offering the same service via UNEs belonging solely to the ILEC. This rule was also vacated by the 8th Circuit Court, to the extent that this rule establishes a presumption that a network element must be unbundled if it is technically feasible to do so. (Iowa Util. Bd. V. FCC, Nos. 96-3321, *et al.*, 1997 WL 403401, at 46(8th Cir,. July 18, 1997)

Section 51.319, **Specific unbundling requirements.** This rule lists, as a minimum, seven UNEs that an ILEC must provide to requesting carriers for the provision of telecommunications service. The technical feasibility of offering other UNEs by the RBOC is left to the discretion of the state Commission.

The above stated rules apply to access and provisioning of UNEs. The FCC has also developed rules regarding the pricing of UNEs. The pricing section of the FCC's rules fall under Subpart F. However, the 8th Circuit Court vacated all of the rules contained

in Subpart F, i.e., §51.501-515, inclusive, except for §51.515(b), which deals with the application of access charges. (Iowa Util. Bd. V. FCC, Nos. 96-3321, *et al.*, 1997 WL 403401, at 46(8th Cir,. July 18, 1997)

FCC First Report and Order

The FCC defines access to network elements on an unbundled basis to mean that "incumbent LECs must provide the facility or functionality of a particular element to requesting carriers, separate from the facility or functionality of other elements, for a separate fee." The FCC states further that access to an unbundled network facility includes exclusive use of that facility, including that facility's features, functions and capabilities, for a period of time. (¶268)

The FCC states that the duty to provide unbundled network elements on terms, and conditions that are just, reasonable, and nondiscriminatory as stated in the Act, means that the terms and conditions must be provided equally to all carriers, and in the same manner as the incumbent LEC provides to itself. The FCC concludes that such terms and conditions must provide an efficient carrier with a meaningful opportunity to compete. (¶315)

The FCC states in the Local Competition Order that "operations support systems and the information they contain fall squarely within the definition of 'network element' and must be unbundled upon request." (¶516)

In addressing the importance of competing carriers to access the OSS functions of an incumbent LEC, the FCC states that:

> ...if competing carriers are unable to perform the functions of pre-ordering, ordering, provisioning, maintenance and repair, and billing for network elements and resale services in substantially the same time and manner that an incumbent can for itself, competing carriers will be severely disadvantaged, if not precluded altogether, from fairly competing. Thus providing nondiscriminatory access to these support systems functions, which would include access to the information such systems contain, is vital to creating opportunities for meaningful competition. (¶ 518)

The FCC concluded that access to OSS functions is essential to the ability of competitors to provide services. In addition, an incumbent LEC must provide access in the same manner that itself enjoys. Therefore, if an incumbent LEC utilizes an electronic

interface to access the support systems, then it must provide the same access to competing providers also. (¶523)

FCC interpretation per the Ameritech Order:

The FCC reviewed the case where Ameritech, an RBOC, applied for interLATA authorization in Michigan. The FCC explains its review and subsequent denial of the Ameritech filing in Order No. 97-298 (the Ameritech Order). The FCC did not evaluate, or comment on, each and every checklist item. With respect to checklist item (ii), the FCC did not comment on whether or not Ameritech was providing nondiscriminatory access to all UNEs. The FCC limited its evaluation of UNEs under checklist item (ii), to whether or not Ameritech provided nondiscriminatory access to all of the operational support systems (OSS) functions. Further, the FCC evaluation included comments on Ameritech's offering of combinations of UNEs.

The FCC reaffirmed its position on combinations of UNEs in the Ameritech Order. The FCC stated that "the ability of new entrants to use UNEs, as well as combinations of UNEs, is integral to achieving Congress' objective of promoting competition in the local market." The FCC also commented that the 8th Circuit Court upheld its rule (Rule 51.315 (b)) that prohibits ILECs from separating network elements that the ILEC currently combines. (¶¶332-337)

The FCC has determined that RBOCs must provide nondiscriminatory access to OSS functions. The FCC concluded that access to OSS functions falls within an RBOCs duty under section 251(c)(3) to provide UNEs (¶130) and believes that because §§251(c)(3) and 251(c)(4) include OSS, an examination of an RBOCs OSS is necessary to evaluate compliance with the UNE and resale portions of the checklist (¶131)

The FCC states that the RBOC's duty to provide items under the checklist, must include rates and terms that comply with the Act "or, where no competitor is actually using the item, to make the item available as both a legal and practical matter." The FCC also determined that OSS functions are a "term or condition" of unbundling other network elements and concluded that OSS performance is integral to the determination of whether or not the RBOC is providing all of the items contained in the checklist. (¶132)

The FCC listed several components for the provision of access to OSS. These components include:

1. the interface, or gateway, which is used to interconnect the ALECs own internal OSS to an RBOC's OSS.

2. a processing link, either electronic or manual, between the interface and the RBOC's internal OSS (which includes all necessary back office systems and personnel).

3. all internal OSS or Legacy systems that an RBOC uses in providing UNEs to an ALEC. (¶134)

According to the FCC, an RBOC must provide more than just an interface in order to comply with the nondiscriminatory access standard for OSS. The FCC states that in order for an RBOC to meet the nondiscriminatory access standard, no limits may be placed on the processing of information between the interface and the legacy systems, if such limits did not permit an ALEC to perform a function in substantially the same time and manner as the RBOC performs the function for itself. Further, the FCC asserts that this standard requires it to review all of the processes implemented by the RBOC to provide access to the OSS functions. (¶135)

The FCC and the Department of Justice (DOJ) are in agreement that the inquiry into the processes used by the RBOC would involve two parts. First, the FCC will determine if the RBOC has provided the systems and personnel that are sufficient to provide access to each of the required OSS functions. In addition, the FCC will look at whether or not the RBOC is providing the assistance and training that ALECs need to use the OSS functions. (¶136) This assistance includes providing ALECs with the technical specifications of the interfaces and legacy systems, so that ALECs can modify or design their own internal OSS to communicate with the RBOC's systems. Also, the FCC states that the RBOC must demonstrate whether or not its OSS is capable of handling both current and projected demand. (¶137)

Second, the FCC will determine the readiness of the OSS functions to be used by the ALECs. (¶136) This, among other things, involves whether or not the RBOC's OSS is currently able to handle both current and foreseeable demand. The FCC and the DOJ agree on the standard for operational readiness, which is evidence of actual commercial usage. The FCC asserts that actual commercial usage is the most probative evidence of operational readiness. In addition, the FCC does not require an RBOC to ensure that ALECs are using all OSS functions available to them; however, the RBOC is charged with demonstrating that the reason an ALEC is not using a particular OSS function is strictly a business decision of the ALEC, rather than a lack of OSS function availability. The FCC

states that it may consider other forms of evidence for commercial readiness if the RBOC can demonstrate why ALECs are not using all available OSS functions. The other forms of evidence that the FCC will consider, absent actual commercial usage are: carrier-to-carrier testing, independent third-party testing, and internal testing. (¶138)

The FCC stated that OSS functions associated with pre-ordering, ordering, provisioning, maintenance and repair, and billing all have retail analogues for resale services and unbundled network elements, and thus equivalent access is the standard required by the Act for all of these functions. (¶140) For those OSS functions that do not have a retail analogue, the FCC stated that the RBOC must demonstrate that it is meeting the nondiscriminatory access standard for UNEs by offering an efficient carrier a meaningful opportunity to compete. (¶141)

The FCC concluded in the Ameritech order, that its requirement on RBOCs to demonstrate nondiscriminatory access to OSS functions is "achievable." The FCC stated: "We require, simply, that the BOC provide the same access to competing carriers that it provides to itself." (¶143)

FPSC's INTERPRETATION OF SECTION 271 REQUIREMENTS

In the FPSC's arbitration Order for Docket Nos. 960833-TP, and 960846-TP, the Commission agreed with all of the FCC's requirements related to UNEs (including OSS), except for the TELRIC cost methodology. The FPSC deviated from that methodology in determining UNE costs by adopting the TSLRIC cost methodology. The 8th Circuit Court ruled that states have the right to determine which cost methodology to apply. (Iowa Util. Bd. V. FCC, Nos. 96-3321, *et al.*, 1997 WL 403401, at 10-11(8th Cir,. July 18, 1997) As stated above, the FCC still believes that TELRIC is the appropriate cost methodology.

The PSC agreed with the FCC in allowing ALECs to combine UNEs in any manner they choose, including recreating services. However, this Commission did not address the pricing standard, UNE prices or resale, to be used when recreating services. The 8th Circuit did not vacate the FCC's rule on this, however, the Court did state that LECs are not required to perform the actual combining of the elements. (Iowa Util. Bd. V. FCC, Nos. 96-3321, *et al.*, 1997 WL 403401, at 36(8th Cir,. July 18, 1997)

SUMMARY OF REQUIREMENTS BEING USED FOR THIS ISSUE

Staff generally agrees with the FCC's interpretation of the requirements of Section 271 related to this issue. However, this Commission has not adopted the TELRIC cost methodology as the cost basis for setting rates. The 8th Circuit Court vacated the FCC's pricing rules stating "that the Act directly and straightforwardly assigns to the states the authority to set the prices regarding the local competition provisions of the Act in subsections 252(c)(2) and 252(d)." Staff will base its review of the record in this proceeding in accordance with the requirements of the Act and the FCC's rules, except for those rules that were vacated by the 8th Circuit Court. (Iowa Util. Bd. V. FCC, Nos. 96-3321, *et al.*, 1997 WL 403401, at 46(8th Cir,. July 18, 1997)

Staff believes that BST has the duty to prove that it is providing nondiscriminatory access to UNEs to requesting carriers, including the provision of nondiscriminatory access to its OSS functions. For those UNEs and OSS functions that have not been requested by carriers, BST must demonstrate that it currently has the capability to provide such UNEs and OSS functions, if requested.

STAFF DISCUSSION OF POSITIONS

A. DESCRIPTION OF SERVICE

BellSouth has a duty to provide, to any requesting carrier, nondiscriminatory access to UNEs on rates, terms, and conditions that are just, reasonable, and nondiscriminatory as stated in the Act. This includes providing access to individual UNEs as well as combinations of UNEs. This Commission determined in Docket Nos. 960833-TP, 960846-TP, and 960916-TP, Order No. PSC-96-1579-FOF-TP, issued December 31, 1996, that the following items were technically feasible for BST to provide on an unbundled basis:

A. Network Interface Device
B. Unbundled Loops
C. Loop Distribution
D. Local Switching
E. Operator Systems
F. Multiplexing/Digital Cross-Connect/ Channelization
G. Dedicated Transport
H. Common Transport
I. DA Transport
J. Tandem Switching
K. AIN Capabilities

L. Signaling Link Transport
M. Signal Transfer Points
N. Physical Collocation
O. Virtual Collocation

Although not shown in the list of UNEs above, the Act, FCC rules and orders, and the FPSC arbitration order, all require BellSouth to provide nondiscriminatory access to its operations support system functions. Although collocation is one method of providing access to UNEs, it is also a method for interconnecting facilities and, therefore, will be discussed with interconnection in Issue 2.

The FCC has determined that operations support systems generally include those systems and databases required for pre-ordering, ordering, provisioning, maintenance and repair, and billing. The FCC defines each OSS function as follows:

> Pre-ordering and ordering. "Pre-ordering and ordering" includes the exchange of information between telecommunications carriers about current or proposed customer products and services or unbundled network elements or some combination thereof.
>
> Provisioning. "Provisioning" involves the exchange of information between telecommunications carriers where one executes a request for a set of products and services or unbundled network elements or combination thereof from the other with attendant acknowledgments and status reports.
>
> Maintenance and repair. "Maintenance and repair" involves the exchange of information between telecommunications carriers where one initiates a request for maintenance or repair of existing products and services or unbundled network elements or combination thereof from the other with attendant acknowledgments and status reports.
>
> Billing. "Billing" involves the provision of appropriate usage data by one telecommunications carrier to another to facilitate customer billing with attendant acknowledgments and status reports. It also involves the exchange of information between telecommunications carriers to process claims and adjustments. (47 C.F.R. §51.5)

The FCC also determined that if competing carriers are unable to perform these functions:

> ...for network elements and resale services in substantially the same time and manner that an incumbent LEC can for itself, competing carriers will be severely disadvantaged, if not precluded altogether, from fairly competing. Thus providing nondiscriminatory access to these functions, which would include access to the information such systems contain, is vital to creating opportunities for meaningful competition. (EXH 1, FCC 96-325, ¶518; Calhoun TR 1044, 1045)

Description of Interfaces

BellSouth must demonstrate through its interfaces that competing carriers are receiving nondiscriminatory access to the five OSS functions defined above. In this proceeding, BellSouth has offered pre-ordering through the Local Exchange Navigation System (LENS) interface; ordering and provisioning through the Electronic Data Interchange (EDI), Exchange Access Control and Tracking System (EXACT), and LENS interfaces; maintenance and trouble reporting through the ALEC Trouble Analysis Facilitation Interface (TAFI) as well as the Electronic Bonding Interface (EBI or T1M1); and billing through the access to the Billing Daily Usage File. (Calhoun TR 1042-1106) In addition, carriers have the option of sending orders via facsimile. (Bradbury TR 2817)

1. Pre-Ordering: LENS

The Local Exchange Navigation System (LENS) is the interface developed by BellSouth to allow ALECs to perform both pre-ordering and ordering functions. Although LENS provides ordering capability, BST states that LENS is to be used primarily for pre-ordering functions. (Calhoun TR 1077) LENS can be accessed by : (1) dial-up; (2) LAN-to-LAN connection; and (3) the Internet. (Bradbury TR 2817) Pre-ordering functions generally take place while a customer is on-line negotiating a service order. (Bradbury TR 2839; Calhoun TR 1060) The parties agree that pre-ordering information generally refers to accessing information that allows a customer service representative to validate a street address, and access telephone number information, products and services information, due date information, and customer service record information. LENS provides access to each of these types of information. (Calhoun TR 1060; Bradbury TR 2839) According to BST, LENS has been available for ALEC use since April, 1997. (Calhoun TR 1096)